

March 16, 2012

Duke Energy Miami Fort Generating Station 11021 Brower Road North Bend, OH 45052

Attention: Ms. Tara Thomas

Environmental Coordinator

Re: Results – March 2012

Low-Level Mercury Sampling Miami Fort Generating Station

North Bend, Ohio

In accordance with your request, URS prepared the following letter report transmitting low-level mercury test results for samples collected at the Miami Fort Generating Station located in North Bend, Ohio.

The scope of work involved the sampling of intake and discharge waters from the following sources and analysis of those samples for low-level mercury.

- 1. River Intake
- 2. Station 601 (WWT Influent)
 [Samples were collected at this station one detention time (approximately 14 hours as specified by Duke Energy) before samples collected at Outfall 608]
- 3. Outfall 608 (WWT Effluent)
 [Samples were collected at this outfall one detention time (approximately 14 hours as specified by Duke Energy) after samples collected at station 601]
- 4. Outfall 002 (Pond B Discharge)

Each sample was collected following the required Method 1669: Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels (Sampling Method) and analyzed by Method 1631. At the request of Duke Energy, a dissolved low-level mercury sample was collected by Method 1669 from Outfall 608 and analyzed by Method 1631. The collected dissolved sample was filtered at the laboratory utilizing 0.45 micron filtration. Also at the request of Duke Energy, total metal mercury sample aliquots (preserved) from Station 601 (Units 7 and 8) were used to have the laboratory pipet off and prepare the supernatant layer of the samples (leaving behind as much of the settled solids as possible) for analysis by Method 7470A.

Field staff from URS' Cincinnati office conducted the sampling and TestAmerica Laboratories Inc. located in North Canton, Ohio performed the analytical procedures. The analytical procedures included the analyses of a collected sample and duplicate sample (duplicates



Duke Energy March 16, 2012 Page 2

(duplicates collected at Outfall 608 and Outfall 002), field blank (field blanks collected at the River Intake, Outfall 608, and Outfall 002), and trip blank.

The results from the **March 1 and 2, 2012** sampling event are presented in the attached Table 1. A copy of the laboratory report is enclosed with this letter.

--00000--

URS is pleased to provide continued assistance to Duke Energy in the execution of their environmental monitoring requirements. If there are any questions regarding the content of this report, please do not hesitate to contact the undersigned.

Sincerely,

URS Corporation

Michael A. Wagner Project Manager

Dennis P. Connair, C.P.G.

Principal

MAW/DPC/Duke Energy-MFS LL Hg 2012 Job No. 14950516

TABLE 1

ANALYTICAL RESULTS LOW-LEVEL MERCURY RIVER INTAKE, STATION 601, OUTFALL 608, AND OUTFALL 002 (POND B)

DUKE ENERGY - MIAMI FORT STATION NORTH BEND, OHIO

	Date Sampled / Results (ng/L, parts per trillion)								
ample ID	1/3-4/2012	2/2-3/2012	3/1-2/2012	4/x/2012	5/x/2012	6/x/2012			
River Intake	7.9	6.1	3.9						
Station 601 (7)	360,000	100,000	1,300,000						
Station 601 (7)*	570	6,000	54,000						
Station 601 (7)* [duplicate]	200	Not Collected	55,000						
Station 601 (8)	210,000	68,000	830,000						
Station 601 (8)*	420	5,300	110,000						
Station 601 (8)*[duplicate]	Not Collected	3,500	Not Collected						
Outfall 608	60	89	48						
Outfall 608 [duplicate]	65	85	49						
Outfall 608 [dissolved, 0.45 micron]	2.9	26	1.6 H						
APB-002	3.2	3.7	2.9						
APB-002 [duplicate]	3.3	3.5	3.6						
Field Blank (RI-FB)	< 0.50	< 0.50	< 0.50						
Field Blank (WWT-FB)	< 0.50	< 0.50	< 0.50						
Field Blank (AP-FB)	< 0.50	< 0.50	< 0.50						
Trip Blank	< 0.50	< 0.50	< 0.50						

Samples collected by URS

Sampling times are noted within the associated laboratory report for each collected sample

Samples analyzed by TestAmerica of North Canton, Ohio

^{* =} Total mercury analysis utilizing Method 7470A [results converted from ug/L (parts per billion) to ng/L]. The aqueous layer of the sample was pipetted off and prepared, with care to leave behind as much of the settled solids as possible.



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica North Canton 4101 Shuffel Street NW North Canton, OH 44720 Tel: (330)497-9396

TestAmerica Job ID: 240-8931-1

Client Project/Site: Miami Fort LL Hg 2012 - J12030189

Revision: 1

For:

Duke Energy Corporation 139 East Fourth Street ex 510 Cincinnati, Ohio 45202

Attn: Ms. Sue Wallace

Authorized for release by: 3/22/2012 10:58:55 AM

Denise Pohl Project Manager II

denise.pohl@testamericainc.com

·····LINKS ·······

Review your project results through Total Access

Have a Question?



Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	10
QC Sample Results	25
QC Association Summary	27
Lab Chronicle	29
Certification Summary	32
Chain of Custody	33
Receipt Checklists	38

4

5

0

9

10

12

13

Definitions/Glossary

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Qualifiers

Metals

Qualifier	Qualifier Description
Н	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
\tilde{\pi}	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

3

4

7

8

9

10

12

13

Case Narrative

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

Job ID: 240-8931-1

Laboratory: TestAmerica North Canton

Narrative

CASE NARRATIVE

Client: Duke Energy Corporation

Project: Miami Fort LL Hg 2012 - J12030189

Report Number: 240-8931-1

Revised

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

Revision 03/22/2012: Includes addition to Case Narrative for Total Mercury.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 03/03/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 9.7 C.

DISSOLVED LOW LEVEL MERCURY

Sample 608 WWT DISS (240-8931-11) was analyzed for dissolved low level mercury in accordance with EPA Method 1631E. The samples were prepared on 03/07/2012 and analyzed on 03/08/2012.

Method 1631E: The following sample was received after filtration holding time expired: 608 WWT DISS.

No difficulties were encountered during the Low Level Mercury analysis.

All quality control parameters were within the acceptance limits.

-

TestAmerica Job ID: 240-8931-1

3

4

5

6

R

9

11

13

Case Narrative

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Job ID: 240-8931-1 (Continued)

Laboratory: TestAmerica North Canton (Continued)

TOTAL MERCURY

Samples 601 (7) WWT TOT (240-8931-2), 601 (7) WWT TOT DUP (240-8931-3) and 601 (8) WWT TOT (240-8931-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 03/07/2012 and analyzed on 03/12/2012.

Samples 601 (7) WWT TOT (240-8931-2)[10X], 601 (7) WWT TOT DUP (240-8931-3)[10X] and 601 (8) WWT TOT (240-8931-5)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 7470A: Per client instructions, the aqueous layer of the sample was pipetted off and prepared for samples 601 (7) WWT TOT, 601 (7) WWT TOT DUP, 601 (8) WWT TOT with care to leave behind as much of the settled solids as possible.

No other difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

LOW LEVEL MERCURY

Samples 601 (7) WWT (240-8931-1), 601 (8) WWT (240-8931-4), RI FB (240-8931-6), RI (240-8931-7), 608 WWT FB (240-8931-8), 608 WWT (240-8931-9), 608 WWT DUP (240-8931-10), OUTFALL 002 FB (240-8931-12), OUTFALL 002 (240-8931-13), OUTFALL 002 DUP (240-8931-14) and TRIP BLANK (240-8931-15) were analyzed for Low Level Mercury in accordance with EPA Method 1631E. The samples were prepared on 03/05/2012 and analyzed on 03/09/2012.

Mercury failed the recovery criteria low for the MSD of sample OUTFALL 002 DUPMSD (240-8931-14) in batch 240-36537.

Mercury failed the recovery criteria high for the MS of sample 240-8973-3 in batch 240-36344.

Refer to the QC report for details.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples 601 (7) WWT (240-8931-1)[400000X], 601 (8) WWT (240-8931-4)[200000X], 608 WWT (240-8931-9)[20X] and 608 WWT DUP (240-8931-10)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Low Level Mercury analyses.

All other quality control parameters were within the acceptance limits.

E

6

_

10

13

Method Summary

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	TAL NC
7470A	Mercury (CVAA)	SW846	TAL NC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

4

5

6

0

10

11

13

Sample Summary

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-8931-1	601 (7) WWT	Water	03/01/12 17:30	03/03/12 09:10
240-8931-2	601 (7) WWT TOT	Water	03/01/12 17:33	03/03/12 09:10
240-8931-3	601 (7) WWT TOT DUP	Water	03/01/12 17:35	03/03/12 09:10
240-8931-4	601 (8) WWT	Water	03/01/12 17:40	03/03/12 09:10
240-8931-5	601 (8) WWT TOT	Water	03/01/12 17:45	03/03/12 09:10
240-8931-6	RI FB	Water	03/01/12 17:50	03/03/12 09:10
240-8931-7	RI	Water	03/01/12 17:55	03/03/12 09:10
240-8931-8	608 WWT FB	Water	03/02/12 08:20	03/03/12 09:10
240-8931-9	608 WWT	Water	03/02/12 08:25	03/03/12 09:10
240-8931-10	608 WWT DUP	Water	03/02/12 08:30	03/03/12 09:10
240-8931-11	608 WWT DISS	Water	03/02/12 08:35	03/03/12 09:10
240-8931-12	OUTFALL 002 FB	Water	03/02/12 08:50	03/03/12 09:10
240-8931-13	OUTFALL 002	Water	03/02/12 08:55	03/03/12 09:10
240-8931-14	OUTFALL 002 DUP	Water	03/02/12 09:00	03/03/12 09:10
240-8931-15	TRIP BLANK	Water	03/02/12 00:00	03/03/12 09:10

3

4

_

7

8

9

10

13

_

Client: Duke Energy Corporation

No Detections

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 601 (7) WWT Lab Sample ID: 240-8931-1 Result Qualifier Dil Fac D Method Unit Analyte RL Prep Type 1300000 400000 1631E Mercury 200000 ng/L Total/NA Client Sample ID: 601 (7) WWT TOT Lab Sample ID: 240-8931-2 Result Qualifier Unit Dil Fac D Method Mercury 54 2.0 ug/L 10 7470A Total/NA Client Sample ID: 601 (7) WWT TOT DUP Lab Sample ID: 240-8931-3 Analyte Result Qualifier RL Unit Dil Fac D Method Prep Type Mercury 55 2.0 ug/L 10 7470A Total/NA Client Sample ID: 601 (8) WWT Lab Sample ID: 240-8931-4 Analyte Result Qualifier RL Unit Dil Fac D Method Prep Type 830000 Mercury 100000 ng/L 200000 1631E Total/NA Client Sample ID: 601 (8) WWT TOT Lab Sample ID: 240-8931-5 Analyte Result Qualifier RL Unit Dil Fac D Method Prep Type 110 4.0 ug/L 20 7470A Total/NA Mercury Client Sample ID: RI FB Lab Sample ID: 240-8931-6 No Detections Client Sample ID: RI Lab Sample ID: 240-8931-7 Result Qualifier Analyte RL Unit Dil Fac D Method Prep Type 3.9 0.50 1 1631E Total/NA Mercury ng/L Lab Sample ID: 240-8931-8 Client Sample ID: 608 WWT FB No Detections Client Sample ID: 608 WWT Lab Sample ID: 240-8931-9 Result Qualifier Dil Fac D Method Analyte RL Unit Prep Type Mercury 49 10 ng/L 20 1631E Total/NA Client Sample ID: 608 WWT DUP Lab Sample ID: 240-8931-10 Analyte Result Qualifier Unit Dil Fac D Method **Prep Type** 49 10 ng/L 20 1631E Total/NA Mercury Lab Sample ID: 240-8931-11 Client Sample ID: 608 WWT DISS Analyte Result Qualifier RL Unit Dil Fac D Method Prep Type 0.50 16 H 1631E Dissolved Mercury ng/L 1 Client Sample ID: OUTFALL 002 FB Lab Sample ID: 240-8931-12

Detection Summary

Client: Duke Energy Corporation

Client Sample ID: OUTFALL 002

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Lab Sample ID: 240-8931-13

Analyte Result Qualifier RL Unit Dil Fac D Method Prep Type 1631E Mercury 2.9 0.50 ng/L Total/NA

Lab Sample ID: 240-8931-14 Client Sample ID: OUTFALL 002 DUP

Dil Fac D Method Result Qualifier Unit Mercury 3.6 0.50 ng/L 1631E Total/NA

Client Sample ID: TRIP BLANK Lab Sample ID: 240-8931-15

No Detections

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 601 (7) WWT

Lab Sample ID: 240-8931-1

Matrix: Water

Date Collected: 03/01/12 17:30 Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Level (CVAFS)

 Analyte
 Result Mercury
 Qualifier
 RL
 Unit ng/L
 D ng/L
 Prepared ng/L
 Analyzed ng/L
 Dil Fac ng/L

5

6

8

9

10

12

13

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 601 (7) WWT TOT

Lab Sample ID: 240-8931-2 Date Collected: 03/01/12 17:33 Matrix: Water

Date Received: 03/03/12 09:10

Method: 7470A - Mercury (CVAA) Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Mercury 2.0 54 ug/L 03/07/12 14:00 03/12/12 15:21

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 601 (7) WWT TOT DUP

Lab Sample ID: 240-8931-3 Date Collected: 03/01/12 17:35

Matrix: Water

Date Received: 03/03/12 09:10

Method: 7470A - Mercury (CVAA)							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	55	2.0	ua/L		03/07/12 14:00	03/12/12 15:23	10

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 601 (8) WWT

Date Collected: 03/01/12 17:40 Date Received: 03/03/12 09:10

Lab Sample ID: 240-8931-4

Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Mercury 830000 100000 ng/L 03/05/12 16:00 03/09/12 15:10 200000

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 601 (8) WWT TOT

Lab Sample ID: 240-8931-5 Date Collected: 03/01/12 17:45 Matrix: Water

Date Received: 03/03/12 09:10

Method: /4/UA - Mercury (CVAA)							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110	4.0	ug/L		03/07/12 14:00	03/12/12 15:25	20

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: RI FB Lab Sample ID: 240-8931-6

Date Collected: 03/01/12 17:50 Matrix: Water

Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Lev	vel (CVAFS)							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		03/05/12 16:00	03/09/12 17:18	1

2

4

9

11

12

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: RI

Lab Sample ID: 240-8931-7

Date Collected: 03/01/12 17:55 Matrix: Water

Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Lev	rel (CVAFS)							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.9		0.50	ng/L		03/05/12 16:00	03/09/12 15:18	1

3

4

5

7

0

10

11

13

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 608 WWT FB

Lab Sample ID: 240-8931-8 Date Collected: 03/02/12 08:20

Matrix: Water

Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	П	0.50	na/l		03/05/12 16:00	03/00/12 17:26	

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 608 WWT

Lab Sample ID: 240-8931-9

Date Collected: 03/02/12 08:25 Matrix: Water Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Level (CVAFS) Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Mercury 49 10 ng/L 03/05/12 16:00 03/09/12 15:27 20

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 608 WWT DUP

Lab Sample ID: 240-8931-10

Matrix: Water

Date Collected: 03/02/12 08:30 Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Mercury 49 10 ng/L 03/05/12 16:00 03/09/12 15:35 20

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: 608 WWT DISS

Date Collected: 03/02/12 08:35 Date Received: 03/03/12 09:10 Lab Sample ID: 240-8931-11

Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac

Mercury 1.6 H 0.50 ng/L 03/07/12 13:00 03/08/12 15:43

+

5

6

8

9

10

12

13

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: OUTFALL 002 FB

Lab Sample ID: 240-8931-12 Date Collected: 03/02/12 08:50

Matrix: Water

Date Received: 03/03/12 09:10

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50 U	0.50	ng/L		03/05/12 16:00	03/09/12 17:35	1

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: OUTFALL 002

Date Collected: 03/02/12 08:55 Date Received: 03/03/12 09:10 Lab Sample ID: 240-8931-13

Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Moreury	2.0		0.50	na/l		03/05/12 16:00	03/09/12 15:44	

4

5

6

0

9

10

15

13

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: OUTFALL 002 DUP

Date Collected: 03/02/12 09:00 Date Received: 03/03/12 09:10 Lab Sample ID: 240-8931-14

. Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

 Analyte
 Result Mercury
 Qualifier
 RL 0.50
 Unit ng/L
 D ng/L
 Prepared 03/05/12 16:00
 Analyzed 03/09/12 15:52
 Dil Fac 03/05/12 16:00

5

6

8

46

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: TRIP BLANK

Date Collected: 03/02/12 00:00 Date Received: 03/03/12 09:10 Lab Sample ID: 240-8931-15

Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Mercury
 0.50
 U
 0.50
 ng/L
 03/05/12 16:00
 03/09/12 17:43
 1

5

_

8

9

11

10

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-35871/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 36537 Prep Batch: 35871

мв мв

Result Qualifier RL Unit Analyte D Prepared Analyzed Dil Fac 0.50 ng/L 03/05/12 16:00 03/09/12 18:18 Mercury 0.50 U

Lab Sample ID: LCS 240-35871/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Water

Analysis Batch: 36537 Prep Batch: 35871 LCS LCS Spike Added Analyte Result Qualifier Unit D %Rec Limits

4.10

ng/L

82

77 - 123

Prep Batch: 36108

Prep Batch: 36108

Client Sample ID: Method Blank

5.00

Lab Sample ID: 240-8931-14 MS Client Sample ID: OUTFALL 002 DUP Prep Type: Total/NA

Matrix: Water

Mercury

Analysis Batch: 36537

Prep Batch: 35871 Spike MS MS Sample Sample %Rec. Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits 3.6 5.00 7.16 ng/L 71 - 125 Mercury

Client Sample ID: OUTFALL 002 DUP Lab Sample ID: 240-8931-14 MSD Prep Type: Total/NA

Matrix: Water

Analysis Batch: 36537

Prep Batch: 35871 MSD MSD Sample Sample Spike %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit Limits %Rec Limit 3.6 5.00 7.11 ng/L Mercury 70 71 - 125

Lab Sample ID: MB 240-36108/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 36344

MR MR

Result Qualifier RL Unit D Dil Fac Analyte Prepared Analyzed 0.50 03/07/12 13:00 03/08/12 16:34 Mercury 0.50 U ng/L

Lab Sample ID: LCS 240-36108/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Water

Analysis Batch: 36344

Spike LCS LCS Added Analyte Result Qualifier Unit D %Rec Limits

5.00 77 - 123 Mercury 5 52 ng/L 110

Lab Sample ID: PB 240-36109/1-B PB

Matrix: Water

Analysis Batch: 36344

Prep Type: Dissolved Prep Batch: 36108

РВ РВ Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Mercury 0.50 U 0.50 ng/L 03/07/12 13:00 03/08/12 16:09

QC Sample Results

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-36093/1-A

Matrix: Water

Analyte

Mercury

Analysis Batch: 36515

Client Sample ID: Method Blank

03/12/12 15:06

03/07/12 14:00

Prep Type: Total/NA

Prep Batch: 36093

Dil Fac

MB MB Result Qualifier RL Unit D Prepared Analyzed 0.20

0.20 U

Lab Sample ID: LCS 240-36093/2-A **Client Sample ID: Lab Control Sample**

ug/L

Matrix: Water Prep Type: Total/NA Analysis Batch: 36515 Prep Batch: 36093

Spike LCS LCS Analyte Added Result Qualifier Limits Unit D %Rec

Mercury 5.00 4.87 ug/L 97 81 - 123

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Metals

Prep Batch: 35871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-1	601 (7) WWT	Total/NA	Water	1631E	
240-8931-4	601 (8) WWT	Total/NA	Water	1631E	
240-8931-6	RI FB	Total/NA	Water	1631E	
240-8931-7	RI	Total/NA	Water	1631E	
240-8931-8	608 WWT FB	Total/NA	Water	1631E	
240-8931-9	608 WWT	Total/NA	Water	1631E	
240-8931-10	608 WWT DUP	Total/NA	Water	1631E	
240-8931-12	OUTFALL 002 FB	Total/NA	Water	1631E	
240-8931-13	OUTFALL 002	Total/NA	Water	1631E	
240-8931-14	OUTFALL 002 DUP	Total/NA	Water	1631E	
240-8931-14 MS	OUTFALL 002 DUP	Total/NA	Water	1631E	
240-8931-14 MSD	OUTFALL 002 DUP	Total/NA	Water	1631E	
240-8931-15	TRIP BLANK	Total/NA	Water	1631E	
LCS 240-35871/2-A	Lab Control Sample	Total/NA	Water	1631E	
MB 240-35871/1-A	Method Blank	Total/NA	Water	1631E	

Prep Batch: 36093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-2	601 (7) WWT TOT	Total/NA	Water	7470A	_
240-8931-3	601 (7) WWT TOT DUP	Total/NA	Water	7470A	
240-8931-5	601 (8) WWT TOT	Total/NA	Water	7470A	
LCS 240-36093/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-36093/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 36108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-11	608 WWT DISS	Dissolved	Water	1631E	
LCS 240-36108/2-A	Lab Control Sample	Total/NA	Water	1631E	
MB 240-36108/1-A	Method Blank	Total/NA	Water	1631E	
PB 240-36109/1-B PB	Method Blank	Dissolved	Water	1631E	

Analysis Batch: 36344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-11	608 WWT DISS	Dissolved	Water	1631E	36108
LCS 240-36108/2-A	Lab Control Sample	Total/NA	Water	1631E	36108
MB 240-36108/1-A	Method Blank	Total/NA	Water	1631E	36108
PB 240-36109/1-B PB	Method Blank	Dissolved	Water	1631E	36108

Analysis Batch: 36515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-2	601 (7) WWT TOT	Total/NA	Water	7470A	36093
240-8931-3	601 (7) WWT TOT DUP	Total/NA	Water	7470A	36093
240-8931-5	601 (8) WWT TOT	Total/NA	Water	7470A	36093
LCS 240-36093/2-A	Lab Control Sample	Total/NA	Water	7470A	36093
MB 240-36093/1-A	Method Blank	Total/NA	Water	7470A	36093

Analysis Batch: 36537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-1	601 (7) WWT	Total/NA	Water	1631E	35871
240-8931-4	601 (8) WWT	Total/NA	Water	1631E	35871
240-8931-6	RI FB	Total/NA	Water	1631E	35871
240-8931-7	RI	Total/NA	Water	1631E	35871

TestAmerica North Canton 3/22/2012

Page 27 of 38

-

5

4

_

0

10

11

12

4 4

- -

QC Association Summary

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Metals (Continued)

Analysis Batch: 36537 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8931-8	608 WWT FB	Total/NA	Water	1631E	35871
240-8931-9	608 WWT	Total/NA	Water	1631E	35871
240-8931-10	608 WWT DUP	Total/NA	Water	1631E	35871
240-8931-12	OUTFALL 002 FB	Total/NA	Water	1631E	35871
240-8931-13	OUTFALL 002	Total/NA	Water	1631E	35871
240-8931-14	OUTFALL 002 DUP	Total/NA	Water	1631E	35871
240-8931-14 MS	OUTFALL 002 DUP	Total/NA	Water	1631E	35871
240-8931-14 MSD	OUTFALL 002 DUP	Total/NA	Water	1631E	35871
240-8931-15	TRIP BLANK	Total/NA	Water	1631E	35871
LCS 240-35871/2-A	Lab Control Sample	Total/NA	Water	1631E	35871
MB 240-35871/1-A	Method Blank	Total/NA	Water	1631E	35871

6

4

6

8

10

-

10

13

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

Client Sample ID: 601 (7) WWT

Date Collected: 03/01/12 17:30 Date Received: 03/03/12 09:10

Lab Sample ID: 240-8931-1

Matrix: Water

		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
ı	Total/NA	Analysis	1631E		400000	36537	03/09/12 15:01	CJ	TAL NC

Client Sample ID: 601 (7) WWT TOT Lab Sample ID: 240-8931-2

Date Collected: 03/01/12 17:33

Date Received: 03/03/12 09:10

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

ſ		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
l	Total/NA	Prep	7470A			36093	03/07/12 14:00	LM	TAL NC
١	Total/NA	Analysis	7470A		10	36515	03/12/12 15:21	AS	TAL NC

Client Sample ID: 601 (7) WWT TOT DUP Lab Sample ID: 240-8931-3

Date Collected: 03/01/12 17:35

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			36093	03/07/12 14:00	LM	TAL NC
Total/NA	Analysis	7470A		10	36515	03/12/12 15:23	AS	TAL NC

Client Sample ID: 601 (8) WWT Lab Sample ID: 240-8931-4

Date Collected: 03/01/12 17:40

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		200000	36537	03/09/12 15:10	CJ	TAL NC

Client Sample ID: 601 (8) WWT TOT Lab Sample ID: 240-8931-5

Date Collected: 03/01/12 17:45

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			36093	03/07/12 14:00	LM	TAL NC
Total/NA	Analysis	7470A		20	36515	03/12/12 15:25	AS	TAL NC

Client Sample ID: RI FB Lab Sample ID: 240-8931-6

Date Collected: 03/01/12 17:50 Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		1	36537	03/09/12 17:18	CJ	TAL NC

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

Client Sample ID: RI Lab Sample ID: 240-8931-7 Date Collected: 03/01/12 17:55

Matrix: Water

Date Received: 03/03/12 09:10

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 1631E 35871 03/05/12 16:00 LM TAL NC Total/NA 1631E 36537 03/09/12 15:18 CJ TAL NC Analysis 1

Client Sample ID: 608 WWT FB Lab Sample ID: 240-8931-8

Date Collected: 03/02/12 08:20 **Matrix: Water**

Date Received: 03/03/12 09:10

Batch Dilution Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 1631E 35871 03/05/12 16:00 LM TAL NC Total/NA 1631E 36537 03/09/12 17:26 TAL NC Analysis 1 CJ

Client Sample ID: 608 WWT Lab Sample ID: 240-8931-9

Date Collected: 03/02/12 08:25 Matrix: Water

Date Received: 03/03/12 09:10

Prepared Batch Batch Dilution Batch Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab 1631E 35871 03/05/12 16:00 TAL NC Total/NA Prep LM Total/NA 36537 03/09/12 15:27 TAL NC Analysis 1631E 20 CJ

Client Sample ID: 608 WWT DUP Lab Sample ID: 240-8931-10

Date Collected: 03/02/12 08:30 **Matrix: Water**

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		20	36537	03/09/12 15:35	CJ	TAL NC

Client Sample ID: 608 WWT DISS Lab Sample ID: 240-8931-11

Date Collected: 03/02/12 08:35 **Matrix: Water**

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			36108	03/07/12 13:00	CJ	TAL NC
Dissolved	Analysis	1631E		1	36344	03/08/12 15:43	CJ	TAL NC

Client Sample ID: OUTFALL 002 FB Lab Sample ID: 240-8931-12

Date Collected: 03/02/12 08:50 Matrix: Water

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		1	36537	03/09/12 17:35	CJ	TAL NC

Lab Chronicle

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Client Sample ID: OUTFALL 002 Lab Sample ID: 240-8931-13

Date Collected: 03/02/12 08:55 Matrix: Water

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		1	36537	03/09/12 15:44	CJ	TAL NC

Client Sample ID: OUTFALL 002 DUP

Lab Sample ID: 240-8931-14

Date Collected: 03/02/12 09:00 Matrix: Water

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		1	36537	03/09/12 15:52	CJ	TAL NC

Client Sample ID: TRIP BLANK Lab Sample ID: 240-8931-15

Date Collected: 03/02/12 00:00 Matrix: Water

Date Received: 03/03/12 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			35871	03/05/12 16:00	LM	TAL NC
Total/NA	Analysis	1631E		1	36537	03/09/12 17:43	CJ	TAL NC

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Duke Energy Corporation

Project/Site: Miami Fort LL Hg 2012 - J12030189

TestAmerica Job ID: 240-8931-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	State Program	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	L-A-B	DoD ELAP		L2315
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio VAP	State Program	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	Federal		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	Washington	State Program	10	C971
TestAmerica North Canton	West Virginia DEP	State Program	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

3

4

5

7

8

9

10

40

TAL-0018 (1008)

1940 1940	Regul	gram: Dw C	☐ NPDES ☐ RCRA ☐ Other		THE LEADER IN ENVIRONMENTAL TESTING TestAmerica Laboratories, Inc.
173 174 17 17 17 17 17 17 1	Client Project Manager:	ER (URS)	e Contact:	Lab Contact:	COC No:
1730	Telephone:	3440		Telephone:	
17.75	Email: /^./ <i>Ke-1</i>	2	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
173 174 175)	TAT if different from below.		lient
173 1 1 1 1 1 1 1 1 1	Method of Shi	pment/Carrier:	ba		ampling
1730	Shipping/Tracking No:	king No:	(N/X)	,,,,,	JobSDGNo : 1
Sample Time At Sample State of the Market Market State of the Mark		Манті	s & Prespatives	76	
1730 1	Sample Date	Sample Time Aducous Sediment Solid Other:	Elifered S Other: Unpres Nation VIEWE HCI HU03	1as 417	Sample Specific Notes / Special Instructions:
1735 X	3-1-12	1730	7	!	
740 X	1			×	
1740 X				*	
745 K			4	74	
1350 K K K K K K K K K				*	
1962 1			7	***	
0825 N O830 A Poison B O830 A Poison B O830 A Date/Time: O840 A Date/Time: O840 A Date/Time: O840 A O840 A	>		4	×.	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Poison B	3-2-12	0820		×	
Poison B The Unknown Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Poison B The Unknown Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer than 1 months Sample Disposal (A fee may be assessed if samples are retained longer			7	×	
Poison B The Unknown Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Months Mont	>	¥			
Pate/Time: Received by: Company: Company: Date/Time: 3-24-3 / 3.65 Received in Laboratory by: Company: Company: Date/Time: 3-24-3 / 3.65 Received in Laboratory by: Company: Company: Date/Time: 3-34-3 / 3.65	Skin Irritant	Unknown	Sample Disposal (A fee may be assessed if sample		ths
Pate/Time: 120 Received by: Company: Company: Date/Time: SAA 13.05 Date/Time: Company: Company: Date/Time: Da	rened	-			
Date/Time: Company: Date/Time: Company: Date/Time: Date/Time: Company: Date/Time: Date/Date/Date/Date/Date/Date/Date/Date/	Company:	70	200 Received by	[2 ~ 2]	
Date/Time: Received in Laboratory by: Company: Date/Time:	Company:	Date/Time: 3-213			
	Company:		Received in Laboratory by:	Company:	

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

©2008, TestAmerica Laboratorica, Inc. 'All rights reserved. TestAmerica & Deskn ™ are trademarks of TestAmerica Laboratories, Inc.

	Relinquished by:	- Lehad	Company: 3/2/12 Date/Time:	Date/Time:	Regulación M	Company:
3/22	Relinquished by		Company: 1 Est Anerica	12.2-/2/13.05	Received by:	Company:
/201	Relinquished by:		Company:	Date/Time:	Received in Laboratory by:	Company:
2	C2008, TestAmerica Lab TestAmerica & Design P	02000), TestAmerica Laboratories, înc. 74 rights reserved. TestAmerica & Design "v. are Indeferrants of TestAmerica Laboratories, înc.				

TestAmerica	THE LEADER IN ENVIRONMENTAL TESTING	TestAmerica Laboratories, Inc. COC No:	of 2000s	For lifth use only	Walk-in-citien Lab professor Lab sampling	THE STATE OF THE S	Sample Specific Notes / Special Instructions:				-					Months	MANTE Date/Time: / A.G.C		3/3/120916
		Lab Contact:	Telephone:	Analyses			ノフフ					2			retained longer than 1 month)	Archive For	Company:	Company:	Company.
Chain of Custody Record	☐ NPDES ☐ RCRA ☐ Other	Site Contact: Lat	1950	Analysis Turnaround Time (In BUS days)	TAT if different from beloe \$\infT44\ldots\frac{12ML}{1}\$; \[\begin{align*}	2 days 5 5 6 6 6 6 6 6 6 6	Composite	4 NG X	3 111 x	4	4	7 4			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	Ketum to Client IN Disposal By Lab	To Transferry	Received by:	S
	TestAmerica Laboratory location: Regulatory program: DW	Client Project Manager: MAN 10 4 And R 17 R.5	Th 573		Method of Shipment/Larrier:	Shipping/Tyacking No: Match	Sample Date Sample Time Air Sediment Se	-12 3835 x	0850 X	0865 1	0900 X	- X				rotson b Unknown	5 3/2/12 Datd/Time: 1200	Anenin	
		Client Contact Client Contact	mitor STATION	te/Zip:	Phone: Project Name: Method	Project Number: Shippifg.	Sample Identification Sample	616 WWT DISS 3-2-12	OUTEAU OUT B	007FAUL 002	OUTFALL COT DUP	TRUD BLANK				Special Instructions/QC Requirements & Comments:	- Shand	Relinquisher by: Company:	

Analytical Laboratory Request Form (ARF)

	ough by striking the "TAB" key.
(2) Save the file & e-mail to:	labcustomer@duke-energy.com
Questions / Pr	oblems Call: 704-875-5245
Custon	ner Information
Name Office Ph	
Mike Wagner 513 651 3	
<u>Fax</u> 513 651 3452	e-Mail Address mike wagner@urscorp.com
	unting Fields
** Only complete if specific charging to Field Ty capital or other special projects is needed.	pe <u>Specific Field</u>
Include field type and specific field entry. **	
Sampli	ing Information
Sampling Personnel / Contractor Scheduled Sam	
URS Field Staff Geologist // URS 3/1/201	
Shippi	ng Address for Kit
Name .	Phone Mail Code
Mike Wagner Street Address - street address and town r	513.651.3440 NA eeded State Zip.Code
36 East 7th Street suite 2300, Cincinnati, Ohio	
333704	
	Reporting
Report Due Date Additional F 3/26/2012	Reports - :pdf file w/ Basic QC and EDD (spreadsheet) is Standard Standard
Report To (e-Mail Address 1) Report To (e-Mail	
mike wagner@urscorp.com tara:thomas@duke	
	oot Specifies
Project Name	ect Specifics Program Type
Miami Fort LL Hg 2012	NPDES Monitoring
Site, Location or Station	State Approximate Number of Days Sampling is Scheduled
Miami Fort Station, Hamilton Co.	Ohio 2
Notes, Special Requests, Required Contract Lab to use, etc.	(LIMS Job Number-Duke Lab Provides)
Sample kit to be issued from TestAmerica - North Canton, Ohio (co Station by end of month of sampling. March 2012 Event	intact - Denise Pohl) Note - Data report (prepared by URS) due to Miami Fort
Station by end of month of sampling, materize as one	
Bottles Matrix	Variables, Methods
	dg (collected by method 1669, analysis by Method 1631)
(one location) Dissolv analysis by Method 16	ed LL Hg (0.45 micron, filtered at laboratory)(collected by method 1669,
	ethod 1669, analysis by Method 1631)
3 water Total Hg (Method 747	(A)

Login #:_

Client Duke Energy Site Name Miami F	By:
Cooler Received on 3 3 11 Opened on 3-5.12	
	ica Courier Other
TestAmerica Cooler # Sol Foam Box Client Cooler Multiple	
Packing material used: <u>Bubble Wrap</u> Foam Plastic Bag None COOLANT: Wet Ice Blue Ice Dry Ice Water Wone	Other
1. Cooler temperature upon receipt	,
IR GUN# 1 (CF -2°C) Sample Temp 11.7 °C Corrected Temp 9	1.7 ℃
IR GUN# 4G (CF -1°C) Sample Temp °C Corrected Temp	°C
IR GUN# 5G (CF -1°C) Sample Temp°C Corrected Temp	°C
IR GUN# 6Y (CF -2°C) Sample Temp°C Corrected Temp	°C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity	Yes 📈 🕽
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No NA
-Were custody seals on the bottle(s)?	Yes No
3. Shippers' packing slip attached to the cooler(s)?	Ves No
4. Did custody papers accompany the sample(s)?	No No
5. Were the custody papers relinquished & signed in the appropriate place?	(es) No
6. Did all bottles arrive in good condition (Unbroken)?	Y60 No
7. Could all bottle labels be reconciled with the COC?	Kes No
8. Were correct bottle(s) used for the test(s) indicated?	Yes No
9. Sufficient quantity received to perform indicated analyses?	Yes No
10. Were sample(s) at the correct pH upon receipt?	Yes (NO NA
11. Were VOAs on the COC?	Yes (No)
12. Were air bubbles >6 mm in any VOA vials?	Yes No NA
13. Was a trip blank present in the cooler(s)?	Yes No
Contacted PM Date by	via Verbal Voice Mail Other
	The Follows Follows
Concerning	The state of the s
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	
Concerning	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	otal Ha
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	otal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Ha
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	otal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	otal Ha
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	otal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	2 Had Hig
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES high temp - OK - LUHg + 1	stal Hg
Concerning 14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Aight temp - OK - LUHg + 4- 15. SAMPLE CONDITION	stal Hag
14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES LUHY + + LUHY + + 15. SAMPLE CONDITION Sample(s) were received after the recommendation of the condition of the	mended holding time had expired.
14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES LUHY + 1: LIHY + 1: 15. SAMPLE CONDITION Sample(s) were received after the recomposition of the sample of th	mended holding time had expired. were received in a broken container.
14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES LUHY + + LUHY + + 15. SAMPLE CONDITION Sample(s) were received after the recompany to the sample of the samp	mended holding time had expired.

TestAmerica North Canton Sample Receipt Form/Narrative

16. SAMPLE PRESERVATION

Sample(s) / + 2 50 A LL 3 500 Were further preserved in Sample Receiving to meet recommended pH level(s). (Vitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)?

Client ID	pΗ	<u>Date</u>	Initials
	٧ كــــــــــــــــــــــــــــــــــــ	3.5.12	18
(7) wwitet		3-3.1	7
DUP DUP	5		
(8) WWT TOT	12		
			ļ
	<u>.</u>		
			· · · · · ·
			1
			<u> </u>
	,		
,	<u> </u>		
	- A.		
			<u></u> .
	*,	,,5,,5,,	
	· ·		
	<u> </u>		
·			
<u> </u>			
	·		
			4
			· · · · · · · · · · · · · · · · · · ·
			-
			
			, N.
			A.
			ing RMs

- C - 1 - #	· Temp. °C	IR#	Coolant
Cooler#	тепр. С	11\(\pi\)	COOlain
			. 15. 5- 190

			COLUMN TO SERVICE SERV
			975. 2012. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			19
			200 A
		****	AD BURNASA

3/22/2012

Login Sample Receipt Checklist

Client: Duke Energy Corporation Job Number: 240-8931-1

Login Number: 8931 List Source: TestAmerica North Canton

List Number: 1
Creator: Sutek, Nick

Creator: Sutek, Nick				
Question	Answer	Comment		
Radioactivity either was not measured or, if measured, is at or below background	N/A			
The cooler's custody seal, if present, is intact.	True			
The cooler or samples do not appear to have been compromised or tampered with.	True			
Samples were received on ice.	N/A			
Cooler Temperature is acceptable.	True			
Cooler Temperature is recorded.	True	9.7		
COC is present.	True			
COC is filled out in ink and legible.	True			
COC is filled out with all pertinent information.	True			
s the Field Sampler's name present on COC?	True			
There are no discrepancies between the sample IDs on the containers and the COC.	True			
Samples are received within Holding Time.	True			
Sample containers have legible labels.	True			
Containers are not broken or leaking.	True			
Sample collection date/times are provided.	True			
Appropriate sample containers are used.	True			
Sample bottles are completely filled.	True			
Sample Preservation Verified.	True			
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True			
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True			
Multiphasic samples are not present.	True			
Samples do not require splitting or compositing.	True			
Residual Chlorine Checked.	N/A			

4

5

_

10

19

13